

CLAIM AMENDMENTS

This listing of claims replaces all prior versions:

1. Canceled.
2. Canceled.
3. Canceled.
4. Canceled.
5. Canceled.
6. Canceled.
7. Canceled.
8. Canceled.
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12. Canceled.
13. Canceled.
14. Canceled.
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16. Canceled.

17. (Original) A system for measuring scattering of an optical medium, comprising:

- an imaging device configured to acquire a plurality of point spread functions of the medium, each point spread function comprising a component due to optical aberration of the medium and a component due to scatter;
- a memory configured to store information corresponding to the plurality of point spread functions;
- a microprocessor in communication with the memory and configured to perform instructions using the information, the instructions including:
 - determining the component due to optical aberration; and
 - determining the component due to scatter.

18. (Original) The system of claim 17, wherein the imaging device comprises a Hartmann-Shack wavefront sensor.

19. (Original) The system of claim 17, wherein each point spread function further comprises a component due to optical aberration of a measurement system, and wherein the instructions further include determining the component due to optical aberration of the measurement system.

20. (Original) The system of claim 17, the instructions further including generating a display of the scattering of the medium.

21. (Original) The system of claim 17, wherein the medium comprises an eye.

22. (Original) The system of claim 21, the instructions further including identifying a defect of the eye using the component due to scatter, the defect contributing to local scattering.

23. (Original) The system of claim 22, wherein the defect comprises a cataract.

24. (Original) The system of claim 22, wherein the defect comprises an abnormality of a tear film, a corneal scar, a vacuole, edema, a foreign body, an abnormality of a lens, an abnormality of the vitreous, drusen, defective contact lenses, defective spectacle lenses, IOL, or any combination thereof.

25. (Original) The system of claim 22, wherein the identifying a defect comprises identifying a defect before or after laser eye surgery.

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